

Application No.: 10/501,487
Amendment Dated: November 9, 2007
Reply to Office Action of: August 22, 2007

AOY-3983US

Remarks/Arguments:

Preliminary Matters

Claims 1, 2, 4, 6, 19, and 20 are presently pending and all pending claims stand rejected. Claims 1, 2, 4, and 6 were previously withdrawn. Claim 19 is herein amended and claim 20 is cancelled. Claim 21 is newly added. Support may be found throughout the specification as originally filed. For example, see paragraphs [0471], [0474], [0565]-[0566], and [0588]-[0590] of the specification. Applicant contends that no new matter is added. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claim Rejection Under 35 U.S.C. 112:

Page 2 of the Office Action recites that "Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite..." because the claim does not positively recite "where the information is stored, such as on the tube, on the bead, or otherwise." Applicant herein amends claim 19 to provide recitation of where information is stored. Applicant respectfully submits that this amendment obviates the rejection of claim 19 as being indefinite and withdrawal of the rejection of claim 19 under 35 U.S.C. 112, second paragraph, is respectfully requested.

Page 3 of the Office Action recites that "Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite..." because "[a]pplicant has not provided any structure for the analyzing device...." Applicant herein cancels claim 20 to substitute thereof, newly added claim 21 to properly recite a method for analyzing a specimen.

Claim Rejection Under 35 U.S.C. 102(b):

Page 3 of the Office Action recites that "Claims 19 and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by Kambara (6,288,220, corresponding to JP 11-243997)." Applicant respectfully submits that these claims, as amended, are allowable over Kambara for at least the reasons set forth below.

Claim 19, as amended, is directed to a biomolecule bead-containing tube and recites features that are neither disclosed nor suggested by Kambara. These features include:

...a biomolecule bead array in which biomolecule beads comprising a spherical bead having a specific biomolecule type immobilized thereon, and marker beads comprising a light absorbing material are arranged in a tubular container made of a material configured to transmit light having a specific wavelength, wherein arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, which corresponds to tube identification information of a specimen, and biomolecule attribution information, which corresponds to the biomolecule type of the biomolecule beads, are stored in a memory.

Kambara does not disclose, teach, or suggest that the "arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, [] corresponds to tube identification information of a specimen..." Instead, Kambara describes on column 2, lines 49-55; column 3, lines 32-36; and column 10, lines 1-2, a DNA probe array having different kinds of DNA probes. Kambara further describes on column 6, lines 36-44, that marker particles (i.e., marker beads) are placed between small particles (i.e., biomolecule beads) that have different kinds of DNA probes attached thereon to "discriminate [the] species of the [DNA] probes on the small particles." Thus, placing markers beads between small particles sets different DNA probes apart from each other. For example, Kambara describes on column 10, lines 1-10 that inserting markers between particles makes it easier to know the array order of each DNA probe in the same array.

Applicant, however, describes in paragraph [0565] that the arrangement of marker beads and biomolecule beads corresponds to tube identification information to distinguish tubes from each other. Thus, as further described in paragraph [0566], the possibility of incorrectly identifying a specimen and its corresponding biological attribute is minimized, thereby leading to a more reliable test.

Page 4 and 5 of the Office Action asserts that discriminating species of the probes in Kambara is the "equivalent to arranging the mark beads corresponding to an identification code indicating identification data and number." Applicant respectfully submits that discriminating species of probes in Kambara is not equivalent to the "arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, [] correspond[ing] to tube identification information of a specimen...," as recited in amended claim 19. Here, Kambara relies on the marker bead arrangement to distinguish DNA probe species within the same array and does not disclose, teach, or suggest that arrangement of the beads corresponds to tube identification information to identify arrays from each other.

Because Kambara does not disclose, teach, or suggest that the "arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, [] corresponds to tube identification information of a specimen...," applicant respectfully submits that claim 19, as amended, is allowable over Kambara, and withdrawal of the rejection of claim 19 is respectfully requested.

Claim 21, as newly added, while not identical to claim 19, recites features similar to the allowable features discussed above with respect to claim 19. Accordingly, applicant contends that claim 21 is also allowable over Kambara for at least the reasons set forth above.

Page 5 of the Office Action recites that "Claims 19 and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by Hauser et al. (WO 99/60170), hereafter Hauser. Applicant respectfully submits that these claims, as amended, are allowable over Hauser for at least the reasons set forth below.

Claim 19, as amended, recites features that are neither disclosed nor suggested by Hauser, namely: the "arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, [] corresponds to tube identification information of a specimen..."

Hauser describes a concept similar to Kambara regarding the arrangement of beads. On page 15, lines 18-21, Hauser states that marker beads "will be dispensed at regular intervals, such as every 5 or every 10 beads" and that placing marker beads between compound beads in such manner provides "internal reference markers from

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AOY-3983US

which the position of particular beads [] may be ascertained." Here, Hauser describes setting groups of compound beads apart from other groups to identify the position of specific beads in the array, but does not disclose, teach, or suggest that arrangement of the beads corresponds to tube identification information to identify arrays from each other.

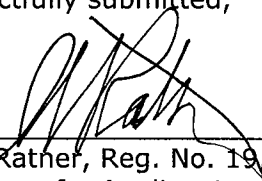
Because Hauser does not disclose, teach, or suggest that the "arrangement in a predetermined order of the biomolecule beads and the marker beads in the biomolecule bead array, [] corresponds to tube identification information of a specimen...," applicant respectfully submits that claim 19, as amended, is allowable over Hauser, and withdrawal of the rejection of claim 19 is respectfully requested.

Claim 21, as newly added, while not identical to claim 19, recites features similar to the allowable features discussed above with respect to claim 19. Accordingly, applicant contends that claim 21 is also allowable over Hauser for at least the reasons set forth above.

Conclusion

In view of the above amendments and remarks, applicant submits that this application is now in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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